REMARKS

Claims 1, 3-53 are currently pending and are presently under consideration. Claim 1 has been amended to incorporate distinguishing features from dependent claim 2. Accordingly, claim 2 has been canceled pending entry of this amendment and new claim 53 has been added, support for which can be found at least at page 12, line 15 through page 14, line 26 of applicants' disclosure. A version of all claims can be found at pages 2-10 of this Reply.

In a Decision on Appeal (February 9, 2007), the Board of Patent Appeals and Interferences reversed all rejections maintained by the Examiner, but provided a new grounds for rejection under 37 C.F.R. 41.50(b) for claim 1 alone. Accordingly, claim 2-52 have no rejections outstanding and are believed to be allowable. Applicants' representative did not pursue further appeal and is submitting this RCE in advance of any Examiner effort relating to MPEP 1214.06 (§§ II and IV). In particular, independent claim 1 has been amended in a manner that is believed to overcome the new grounds for rejection provided by the Board of Patent Appeals and Interferences. Furthermore, the new grounds for rejection are inapplicable to claims 2-52, so all pending claims are believed to be in condition for allowance.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claim 1 Under 35 U.S.C. §102(e)

The Board of Patent Appeals has rejected claim 1 under 35 U.S.C. §102(e) as being anticipated by Esker (US 6,236,277). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Claim 1 has been amended to recite features neither taught nor suggested by Esker.

> A single prior art reference anticipates a patent claim only if it expressly or inherently describes ***each and every limitation set forth in the patent claim***. *Trintec Industries, Inc., v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 U.S.P.Q.2D 1597 (Fed. Cir. 2002); *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051,

> 1053 (Fed. Cir. 1987) (emphasis added). ***The identical invention must be shown in as complete detail as is contained in the … claim***. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (emphasis added).

The claimed subject matter relates generally to industrial control systems (*see, e.g.*, control system 50, FIG. 2) with a time synchronization apparatus (*see, e.g.*, S/L 82, FIG. 2) for synchronizing operation of a first controller (*see, e.g.*, controller 56, FIG. 2) with that of a second controller (*see, e.g.*, controller 54, FIG. 2). More specifically, the time synchronization apparatus can be configured to operate as either a master or a slave, can synchronize across disparate and/or multiple time synchronization zones (*see e.g.*, pg. 12, line 15 – pg. 14, line 26) and can function in topologies other than a star topology such as a daisy chain or loop configuration, or combinations thereof (*see e.g.*, pg. 18, ll. 15-17). In particular, independent claim 1 recites, "a processor interface for interfacing the synchronization apparatus with a host processor, the time synchronization apparatus is ***configurable to operate as both a synchronization master and a synchronization slave***." Esker does not teach or suggest these novel features.

While Esker relates to a local clock for an industrial controller synchronizable to a remote master clock with improved synchronization performance over the prior art (*see* FIG. 5), the reference is silent as to the distinguishing feature of a time synchronization apparatus that is ***configurable to operate as both a synchronization master and a synchronization slave***. Rather, Esker discloses a controller 12a that acts as a master clock and controllers 12b-c, that act as slave clocks, respectively. Most particularly, Esker is void of any teaching that controllers 12a-c are configurable to operate in a manner other than what is disclosed. Accordingly, each and every element set forth in the patent claim is not expressly or inherently described by the reference, and this rejection should be withdrawn.

In addition, Esker does not teach or suggest that a synchronization apparatus can be configured as an intermediate node in a ***daisy-chain*** topology, as recited in dependent claim 35. Rather, Esker only discloses synchronization in a star-based topology, wherein the slaves are directly connected to the master. Furthermore, Esker does not teach or suggest time synchronization across disparate synchronization time zones, as recited in

new dependent claim 53.

II. Rejection of Claim 1 Under 35 U.S.C. §102(e)

The Board of Patent Appeals has rejected claim 1 under 35 U.S.C. §102(e) as being anticipated by Yamanaka, *et al*. (US 4,807,259, hereinafter referred to as "Yamanaka"). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Claim 1 has been amended to recite features neither taught nor suggested by Yamanaka.

As with Esker, Yamanaka does not disclose the identical invention in as complete detail as is contained in amended claim 1. In particular, Yamanaka suffers from at least the same deficiencies as Esker. For example, Yamanaka does not teach or suggest a time synchronization apparatus that is ***configurable to operate as both a synchronization master and a synchronization slave***. Rather, Yamanaka discloses suitable hardware for a master (FIG. 3A) and a slave (FIG. 3B), but does not teach or suggest that a master can be configured as a slave or *vice versa*. In addition, Yamanaka requires that a star topology be implemented such that bus 5A connects the master station 1 and slave station 2 (*see* FIGS. 3A-B), and further does not teach or suggest operation in disparate synchronization time zones. Accordingly, for at least the reasons discussed herein, independent claim 1, as well as claims 3-53, are believed to be allowable over all art of reference, and this rejection should be withdrawn.

Conclusion

The present application is believed to be condition for allowance in view of the amendments and comments herein. A prompt action to such end is earnestly solicited.

A credit card payment form is filed concurrently herewith in connection with the $790.00 fee for filing this reply. In the event any additional fees may be due and/or are not covered by the credit card, the Commissioner is authorized to charge such fees, or credit any overpayment to Deposit Account No. 50-1063[ALBRP228US].

The Examiner is invited to contact applicants' undersigned representative over the telephone to expedite favorable prosecution of the subject application.

Respectfully submitted,
AMIN, TUROCY & CALVIN, LLP

/Himanshu S. Amin/
Himanshu S. Amin
Reg. No. 40,894

AMIN, TUROCY & CALVIN, LLP
24th Floor, National City Center
1900 East 9th Street
Cleveland, Ohio 44114
(216) 696-8730 (Telephone)
(216) 696-8731 (Facsimile)